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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

# THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

U. S. DEPARTMENT OF AGRICULTURE

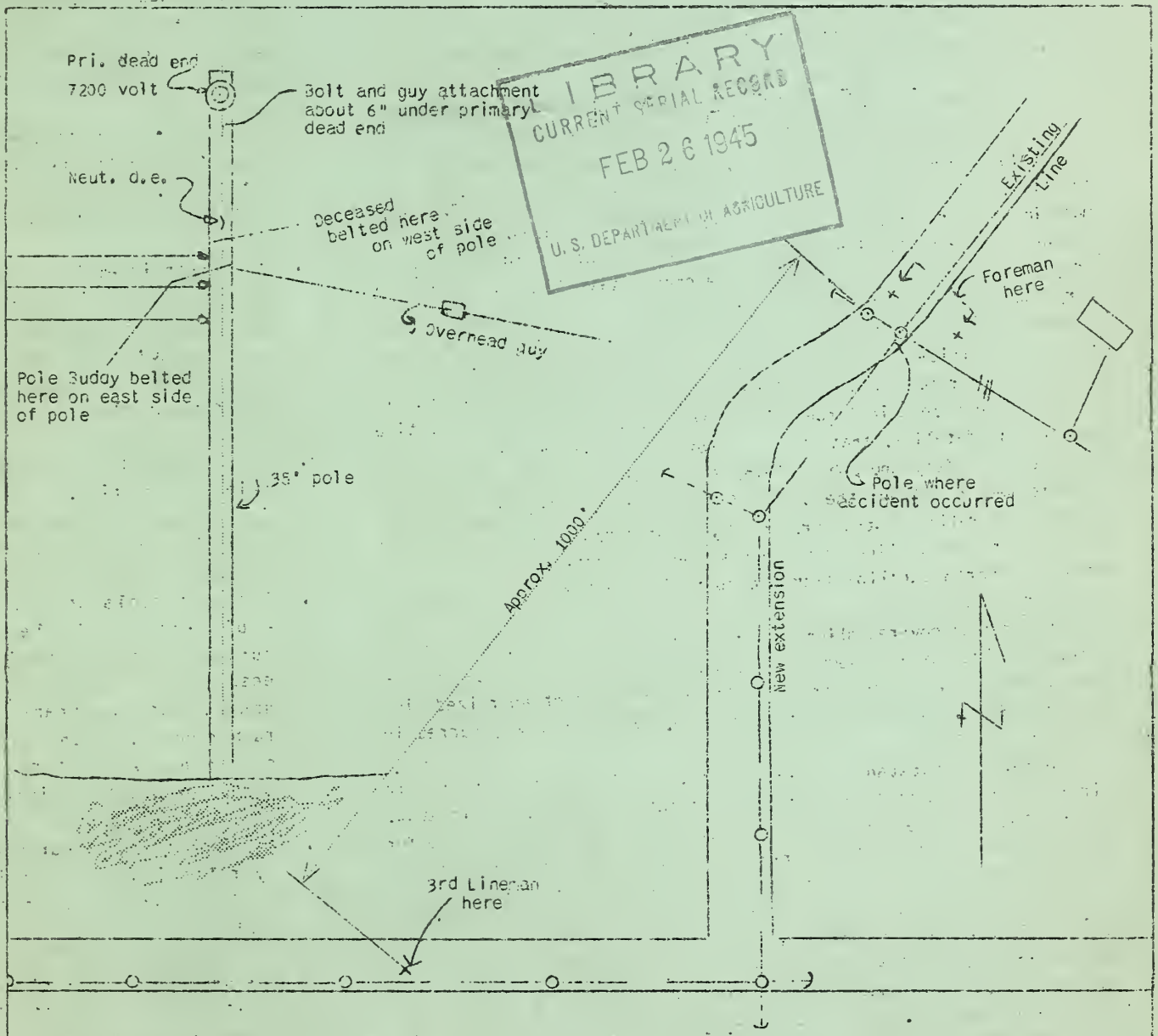
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11 DEATHS IN 1944

## SHOCK FATAL TO EXPERIENCED LINEMAN



WHAT HAPPENED?

READ STORY ON BACK PAGE---

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David A. Fleming, Editor

## THE JOB AHEAD

REA's accident experience record for 1944 shows a total of 11 fatalities, compared to 21 fatalities for 1943. This is, indeed, a very much improved record. But we still have a big job ahead.

We believe that, with full coverage of the Safety and Job Training Program, fatalities occurring on REA cooperative lines could be cut very much below even the 1944 figure.

Look at the map on Page 3. It is interesting to note that 9 of the 11 fatalities occurred in states not covered by a Safety and Job Training Program. Mississippi had one fatality, but the Program in that state had been in force only a very short time. And at the time of the Ohio fatality, that state did not have an instructor.

The REA Safety and Job Training Program now covers 14 states. We are pleased to welcome the state of North Carolina into the Program. The North Carolina instructor, Mr. Roy T. Anderson, has had twenty-one years' experience in line work and has been very active in safety work, coming to North Carolina from a corporation well known for its good safety record.

The Program covered slightly more than 50% of the 407,185 miles of lines energized as of November 30, 1944. In other words, 9 of the fatalities of 1944 occurred on the half of the miles of energized line not covered by the Program at that time, while only 2 occurred in states in the Program.

We have an outstanding example of the value of the Program in Virginia, where a statewide Program was put in force early in 1944. We are pleased to report that no lost-time accidents were reported for the entire state of Virginia during 1944. In 1943 there were 3 fatalities and several accidents of a high severity in that state.

It is interesting to note that those states covered by a Safety and Job Training Program for the year 1944 have an approximate total mileage of 205,805 miles of energized lines, on which we had 2 fatalities in 1944. This leaves 201,380 miles of energized line not covered by a Safety and Job Training Program, on which 9 fatalities occurred in 1944.

A co-op president last summer asked us how much the Program would cost his co-op annually. Told that it would possibly cost between \$250 and \$300 a year, the board president said he thought the Program would be cheap at \$1,000 per year, and perhaps even at a cost of \$2,000 a year. In his opinion the manager and the board would be for a Program. Explaining his personal feelings, he said he was forced to pass a place of business in his community where a man seated in an office would be seen from the street answering telephone calls. This man had lost the use of one hand and the other badly crippled while serving as a co-op lineman.

The president of this board, a prominent and successful farmer, highly respected in his community, felt that anything that could be done to prevent these tragic occurrences would certainly be worth while.

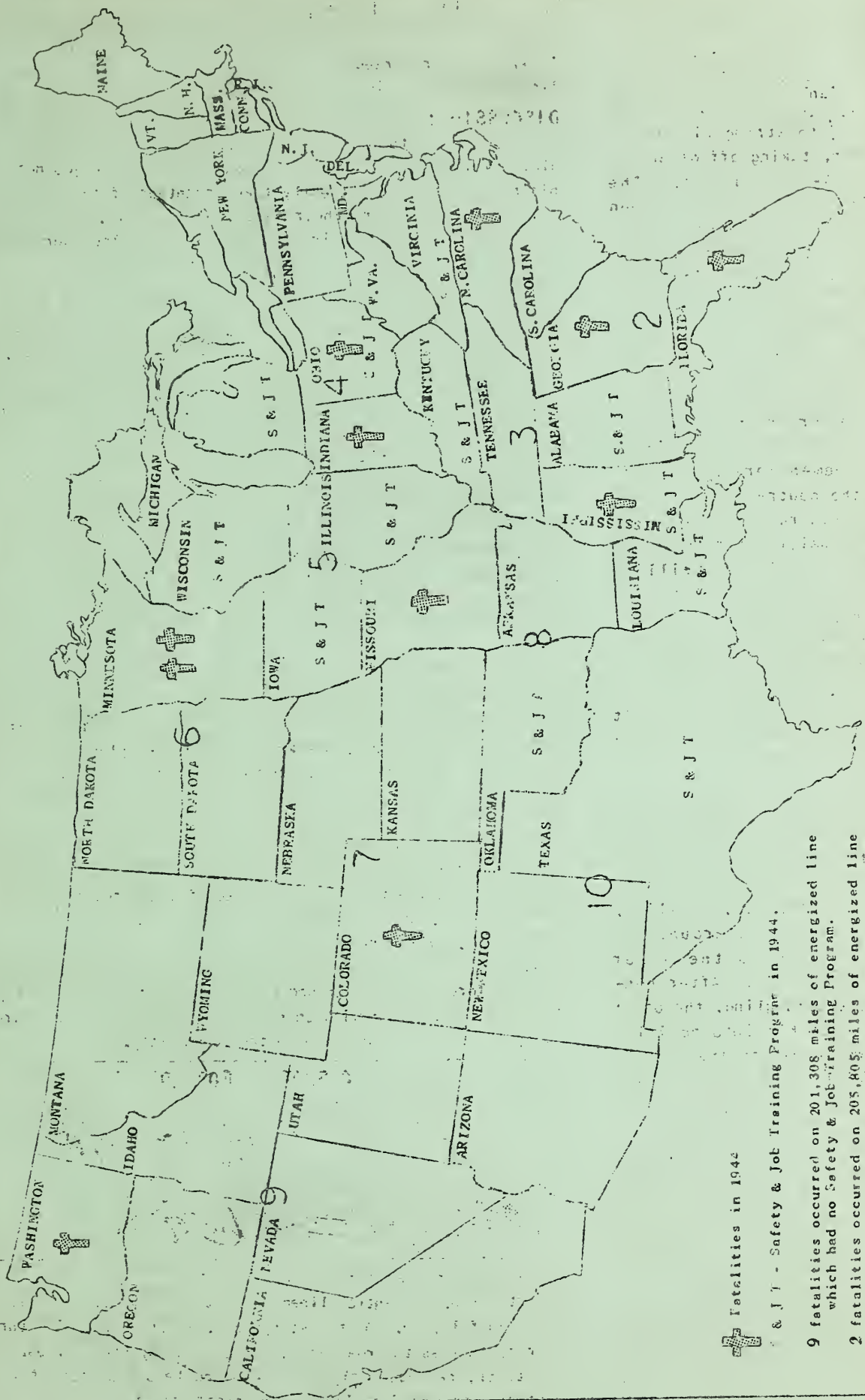
## SOME SAFETY TIPS

A manager of a cooperative with an excellent record of over 113,000 man-hours without a lost-time accident, lists the following recommendations as contributing to good safe operation:

1. No person is permitted to go out alone on any case of trouble, no matter how small it may appear to be.
2. No person is employed without first assuring the co-op his or her interest in safe practices, both at work and behind an auto steering wheel.
3. No time limit is placed on maintenance trips, so there is no need for dangerous speed in work or driving.
4. The best tools and safety equipment available are purchased for our employees. We supply all belts, spurs, safety straps and rubber goods, so that there can be no excuse for dangerous or unsafe equipment.
5. Any infraction of our safety rules is cause for immediate dismissal of the employee.
6. Our program of operation is carried on in the following order of importance:
  - (a) Safety in operation.
  - (b) Service to members.
  - (c) Respect for the individual employee.

The proof of the pudding is usually found in the eating. The proof of the value of the Program is the accident experience record that overflows with accident records from those co-operatives not covered by a Safety and Job Training Program.

# REA REGIONAL MAP



✚ Fatalities in 1942

S & J T - Safety & Job Training Program in 1944.

9 fatalities occurred on 201,308 miles of energized line which had no Safety & Job Training Program.

2 fatalities occurred on 205,805 miles of energized line which had a Safety & Job Training Program.

# STORY OF THE 11TH FATALITY

A line crew consisting of a foreman, three first-class linemen and a groundman were preparing to string wire on an extension, taking off of an existing A-5 dead end. The existing transformer had been installed between the primary wire and the neutral. Two linemen were engaged in changing the location of the transformer to conform to present specifications.

The victim and another first-class lineman had lowered the transformer and raised the neutral and secondary wires. Both linemen were belted-off below the neutral. The victim removed his rubber gloves, apparently waiting for the other linemen to finish drilling holes for the transformer mounting. Apparently he stepped up and around the pole, placing one foot on a secondary bracket, and attempted to tighten a pal-nut on the bolt holding the guy attachment about 6" below the eyebolt supporting the hot wire dead end.

The foreman looked up in time to see the victim with his hand or wrench in contact with the hot phase. Falling, the victim turned around the pole and across the other lineman's safety. After considerable struggling, the other lineman got him into position and lowered him to the ground. Artificial respiration was immediately applied by the foreman, and continued in the ambulance to the hospital.

The deceased was a lineman with 20 years experience and a reputation of being a careful worker. The burns were on the hands and the feet. The doctor at the hospital stated that death was instantaneous.

The third lineman working approximately 1,000 feet away noticed the position of the

lineman, and remarked to the groundman: "They must have killed the line the way that lineman is working."

## DISCUSSION:

There is nothing unusual about a lineman removing his rubber gloves while waiting on his pole buddy to do some job not requiring his help. Linemen frequently take advantage of this opportunity to dry or sometimes warm their hands. Ordinarily, we would say that these linemen proceeded in a careful manner. They were both belted below the neutral. They were wearing their rubber gloves when they lowered the transformer. But there are some procedures which we are inclined to question.

The report states that these men were preparing to string wire on this new extension. We notice the failure to use an insulated transformer gin. We do not know just where the sling was attached that was used to lower the existing transformer. Perhaps it was around the pole just above the guy attachment. Or it may have been around the pole above the eyebolt securing the hot phase dead end. In any event, these linemen had worked very close to the hot wire. Surely the pole buddy saw this man reach up the pole near the hot line.

Operations Memorandum #22.3, Page 2, Paragraph 8, reads as follows: "All work on or near energized lines should be performed from a working position where the 'reaching distance' is such that it will be impossible to touch or fall into a conductor, or piece of equipment, or part of apparatus energized at potentials exceeding 300 volts if the lineman should slip, fall, over-reach or otherwise inadvertently move."

The failure to use an insulated transformer gin indicates that these linemen had come too near the energized conductor in lowering the transformer. We do not know whether they planned to de-energize the line to hang the dead end for the new extension. If they did plan to de-energize the line, we believe the transformer work should be done with a dead line. If they planned to hang the dead end for the new extension with the line energized, they would certainly be brought into a most hazardous position. This practice would certainly increase our accident record. The use of insulated transformer gins, rubber gloves, and the practice of staying out of reach of energized conductors, will certainly prevent some of these most tragic occurrences.

The foreman on the ground carries a great responsibility for the linemen on a pole carrying energized circuits. He should direct their every move and keep his eyes on them constantly.



TOP honors, so far as is known, for this hunting season go to Robert March, apprentice lineman for the Community Electric Cooperative, Suffolk, Va. As the story goes, Robert saw a wild turkey gobbler run across the road and under some honeysuckle vines. Stopping the truck, he made a flying tackle and landed on top of the vines, capturing the gobbler alive. Can anybody top this?